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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,555	10/31/2003	Beth Marcus	19146-002001	3602
20985	7590	10/05/2006	EXAMINER OSORIO, RICARDO	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			ART UNIT 2629	
PAPER NUMBER				

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,555	MARCUS ET AL.	
	Examiner	Art Unit	
	RICARDO L. OSORIO	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-21 and 23-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29,32-42 and 54 is/are allowed.
- 6) ☐ Claim(s) 1,5-19,23-28,30,31,43-46, 49-53 and 55 is/are rejected.
- 7) ☒ Claim(s) 3,4,20,21,47 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/31/03; 5/9/05; 5/15/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of species # 1 in the reply filed on 7/14/2006 is acknowledged. The traversal is on the ground(s) that Figures 4a-4b, 5a-5b, 6a-6b, and 7a-7b, are only illustrative of the above mentioned variations in the input elements disposed on the first and second assembly of the human interface device. This is found persuasive and all claims 1, 3-21, and 23-55 will be examined as follows.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 6, 12, 13, 17-19, 24-28, 30, 31, 43, 49-53, and 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Liebenow et al. (6,909,424).

Regarding claims 1, 12, 17, and 43, Liebenow teaches of a hand-held electronic device (Fig. 1, reference character 100) comprising a memory configured to store a plurality of applications, wherein each application is associated with a set of functions (Fig. 13, reference character 504); a processor configured to process a selected one of the plurality of applications (Fig. 13, reference character 502); a first input assembly having a plurality of input elements on a first surface configured to receive input from a human user through manipulation of the plurality of

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input elements, wherein at least one of the input elements on the first surface is configured to selectively map to one or more input functions, including more than one text input functions, of the set of functions associated with the selected one of the plurality of applications (col. 4, lines 33-43, col. 8, lines 45-67, and col. 9, lines 53-67); and a second input assembly having one or more input elements on a second surface configured to be manipulated by one or more of the human user's fingers, wherein each one of the input elements on the second surface is further configured to be selectively mapped to one or more input functions of the set of functions, or to a different shifting function, corresponding to the selected one of the plurality of applications wherein manipulation of one of the selectable active area causes the text symbol function of the one or more input elements of the first surface to change (col. 5, line 36-col. 6, line 17, col. 8, lines 45-67, and col. 9, lines 53-67) further wherein the plurality of input elements on the first surface and the one or more input elements on the second surface are arranged so as to substantially optimize a biomechanical effect of the human user's hand (see Figs. 3, 4, and 7, and col. 4, line 13-25).

Regarding claim 24, Liebenow further, teaches of a method for inputting data on a hand-held electronic device, wherein at least one of the input elements is further configured to map to a plurality of symbols in a data input mode, wherein each of the plurality of symbols is associated with a unique index position identifier (col. 4, lines 33-43, col. 8, lines 45-67, and col. 9, lines 53-67), and a second surface having one or more selection elements configured to be manipulated by one or more of the human user's fingers, wherein each selection element corresponds to one of the unique index position identifiers (col. 5, line 36-col. 6, line 17, col. 8,

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lines 45-67, and col. 9, lines 53-67), further wherein the plurality of input elements and the one or more selection elements are arranged to substantially optimize a biomechanical effect of the human user's hand (see Figs. 3, 4, and 7, and col. 4, line 13-25), the method comprising executing a selected application from a plurality of applications, wherein the selected application is associated with a set of functions; determining the index position identifier of a desired symbol to be inputted based on the functions associated with the selected application; pressing the selection element corresponding to the index position identifier of the desired symbol with any digit or object held in the human user's hand; and pressing the input element configured to map to the desired symbol with any digit or object held in the human user's hand (col. 4, lines 33-43, col. 5, line 36-col. 6, line 17, col. 8, lines 45-67, and col. 9, lines 53-67).

Regarding claim 28, Liebenow, further, teaches of a method of inputting data on a hand-held electronic device comprising a plurality of input elements in a thumb-manipulated assembly to substantially optimize a biomechanical effect of the human user's thumb and fingers (see Figs. 3, 4, and 7, and col. 4, line 13-25), wherein at least one input element is mapped to more than one text function, and one or more selection elements in a finger-manipulated input assembly, wherein each selection element is mapped to a unique shift position (col. 4, lines 33-43, col. 5, line 36-col. 6, line 17), the method comprising executing a selected text application from a plurality of applications, wherein the selected application is associated with a set of functions; pressing a desired selection element of the finger-manipulated input assembly with a human finger to select a desired shift position the selected text application; and pressing a desired input element of the thumb-manipulated input assembly with a human thumb to input a desired text

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character (col. 4, lines 33-43, col. 5, line 36-col. 6, line 17, col. 8, lines 45-67, and col. 9, lines 53-67).

Regarding claim 5, Liebenow, further, teaches that the processor receives signals generated by the input elements of first or second input assemblies when manipulated by the human use (Although not specifically mentioned, it is inherent that processor (Fig. 13, character 502) will receive the signals generated by the input elements since the selection is related to a specific software included in said processor and because the processor interprets the input signal and formulates a response or output related to the input).

Regarding claims 6, 13, and 19, Liebenow, further, teaches of an input controller, wherein the input controller receives signals generated by the input elements of first surface or active areas input assembly, or second input assemblies, when manipulated by the human user and converts the signals into a form suitable to be interpreted by the processor (Fig. 13, reference character 24).

Regarding claims 18 and 25, Liebenow teaches of physically or electronically labeling at least one input element of the first input assembly or the second input assembly so as to visually indicate an input function that can be selectively accessed by actuating the input element (see Figs 15 and 16).

Regarding claim 26, Liebenow teaches of that determining the index position identifier of the desired character to be inputted comprises locating the input element configured to map to the desired symbol; and counting from left to right the number of symbols preceding the desired symbol labeled on the located input element, wherein the index position identifier of the desired symbol is the number of symbols preceding the desired symbol plus one (see Figs. 15 and 16).

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Regarding claim 27, Liebenow teaches of at least one of the input elements or selection elements is further configured to map to a plurality of modes corresponding to the selected application executing on the hand-held electronic device, at least one of the modes is the data input mode, the method further comprising enabling the data input mode (see Fig. 2, and col. 8, lines 45-67, and col. 9, lines 53-67).

Regarding claim 30, Liebenow teaches of the selected one of the plurality of applications is a text application; and the one or more input elements on the second surface of the second input assembly comprises one or more selection elements, wherein manipulations of the one or more selection elements causes the input elements on first surface of the first input assembly to be selectively mapped from one text function to another text function (see Fig. 2, and col. 8, lines 45-67, and col. 9, lines 53-67).

Regarding claims 49-53, and 55, Liebenow teaches of the processor is further configured to be communicatively coupled to a host electronic device (col. 12, lines 31-40).

Regarding claims 7-11, 14-16, 23, 41, and 44-46, applicant admits in the REMARKS filed 7/14/2006, page 2, lines 13-15, that Figures 4a-4b, 5a-5b, 6a-6b, and 7a-7b, are only illustrative of the above mentioned variations in the input elements disposed on the first and second assembly of the human interface device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the limitations of claims 7-11, 14-16, 23, 41, and 44-46, as taught by applicant, in the device of Liebenow, which are related to Figures 4a-4b, 5a-5b, 6a-6b, and 7a-7b of the instant application, because they are obvious differences, or variations of the input

elements disposed on the first and second assembly of the human interface device of Figures 3a-3d, as admitted by applicant.

Allowable Subject Matter

3. Claims 3, 4, 20, 21, 36, 37, 47, and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 29, 32, and 54 are allowed.

The following is an examiner's statement of reasons for allowance: Claims 29, 32, and 54 are allowable since certain key features of the claimed invention are not taught or fairly suggested by the prior art. In claim 29, "wherein at least one of the input elements of the second input assembly is a selectively configurable sensing surface so as to provide a plurality of delineated active areas, further wherein one or more of the delineated active areas is mapped to one or more functions associated with the selected application". The prior art of record however singularly or in combination fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 571-272-7676. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

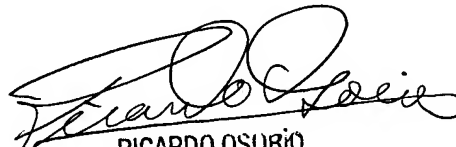
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or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

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RICARDO OSORIO
PRIMARY EXAMINER

Technology Division: 2629

RLO
October 1, 2006